



# AUTOMATIC IDENTIFICATION TECHNOLOGY

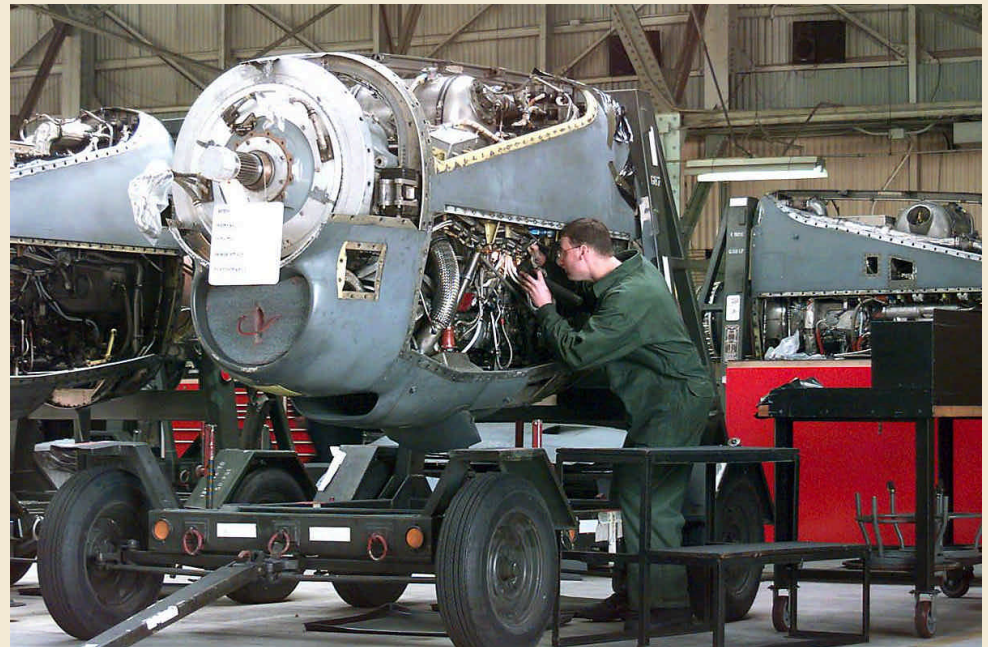
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*Right Item, Right Time, Right Place, Every Time...  
Best Value Solutions for America's Warfighter*



# Agenda

- **“The Issue”**
- **Background**
- **Maintenance Standard**
  - Data Elements**
- **Common Solution**
- **Road Ahead**



**AIT is a key enabler**



# AIT in the Supply Chain

**DoD Concentration to Date**



**Manufacture/  
Acquisition**

**Inbound  
Transportation**

**Supply**

**Outbound  
Transportation**

**Maintenance**

**Disposition**

**Maintenance activities represent  
50% of DoD Log costs and 68%  
of Log workforce.**

**AIT supports end-to-end distribution**



# **“The Issue”**

- **Inaccuracies in Asset Databases**
- **Excessive Manual Data Entry**
- **Time-consuming Processing of Paper**
- **Poor Identification of Items**
- **Separation of Paper from Products**
- **Aged, Untimely Information**



**Support condition based maintenance and total lifecycle management**





# Background

- Navy (NAVAIR) began the process to ensure that data was standard from the Contact Memory Button (CMB) to Naval Logistics Management Information System (NALCOMIS) forms.
- Army rotary-wing aviation (AMATS) did not have a database and were reluctant to participate at first.
- Air Force is currently working on a database for Aviation Maintenance. Will apply to SOCOM CH53 fleet initially.
- DoD AIT Office acted as intermediary to bring Services together.
- Process commenced Aug 2001
- Consensus reached Dec 2001
- Working document delivered to Services Feb 2002



**Participants: USN/USMC, Army, A/F, SOCOM**



# Maintenance Data Element Standardization

- **Data Identifiers (DIs) and Data Element Identifiers (DEIs) in MH10 format (Syntax and Semantics)**
- **Forwarded to DoD Data Dictionary (Functional Administrator)**
- **Living document!**
- **Will Utilize MH10 Looping structure...not limited to CMB**
- **Core Data Elements- Supports all three forms (A/F 95, Army 2410 and NALCOMIS)**
- **Defined over 120 Data Elements**
- **Programmers**



**Manufacturer ID (CAGE, DUNS, UCC.EAN)**  
**Part Number**  
**Traceability Number (Serial #, Lot/Batch #)**  
**DOM – Date of Manufacture**  
**TSN – Time Since New**  
**TSO – Time Since Overhaul**  
**NSN – National Stock Number**  
**Significant Mods/TCTO's/ECP's**  
**Warranty**



# Common Aviation Solution

- Key Maintenance Enabler
- Increased data accuracy, reporting & reliability
- Links maintainers to Acquisition, Logistics Systems and Combat Systems
- Reduced resource requirement for data correction



**Why: So that any Depot Level Repairable is tracked in the Maintenance world throughout the system from any Service!**



# Aviation Component Tracking

- Configuration and Material Management System
- Life-Cycle Tracking of Components
  - Part number, Serial number, Cage Code and NIIN
- Scheduled Removal Component (SRC) Card Data
- Implemented ECPs/LECPs
- Marking of all major Components in the Squadron level
- Intended to Accommodate CM, Maintenance, Supply Requirements
- Designed to Support Equipment at all Points Throughout the Life Cycle
- Replaces the Manual Logbook



**AIT product mark is key**





# *The Road Ahead*

Ammunition 2D Barcode  
Ground Equipment (AMC, TACOM, etc.)  
Aviation Ground Support Equipment  
Shipboard Equipment (Navy, Army)





## Conclusion

With AIT as a key enabler for the Future Logistics Enterprise, it is critical that we quickly and efficiently institutionalize AIT throughout DoD Maintenance...

**We are making progress!**

**We need your help to accelerate that progress!!!**

**Implementation**

**Institutionalization**

**Compliance**



# Back-up Slides

## Sample Data Stream:

[)]>«RS»06«GS»S12345267989«GS»1P1090GTFR566«GS»17V  
12345«GS»1T11MBGTDT6-00«GS»N1234003451234«RS»  
07«GS»5299009909«GS»38WIDGET«GS»53TT66BH667788«  
GS»821234,6«GS»8312345,5«RS»«EOT»